REMARKS

Applicants respectfully request consideration of this application. The drawings filed on December 14, 2000, and June 16, 2001 were objected to for various reasons including pale lines and blurry letters. Applicants submit corrected drawings for all figures (Figs. 1A – 20B) and request removal of the objection. The specification was objected to for lack of clarity of description with respect to Figure 7 in the Brief Description of the Drawings. Applicants submit an amended description to better describe Figure 7. Also, the status of U.S. patent application no. 09/190,947, which has issued into U.S. patent no. 6,331,850, has been updated. No new matter has been added by the amendments. Applicants also submit a corrected IDS, as requested by the Examiner, that includes the names of the five inventive entities that were not identified when first submitted.

Claims 1 – 38 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 – 38 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent no. 5,602,715 to Lempicki et al. ("Lempicki"). Claims 1, 8, 14, 19, 23 – 25, 28, 34, and 35 have been amended. The amendments are supported by the specification. No new matter has been added by the amendments. No new claims have been added. As such, claims 1 – 38 remain pending in this application.

Amended independent claim 1 provides:

> A keyswitch, comprising:
> a plurality of legs interleaved together without a pivot point

approximately central to the plurality of legs, each of the plurality of legs having a bottom surface;

a spring to engage at least one of the bottom surfaces of the plurality of legs;

a keycap disposed above the plurality of legs; and

a base plate disposed below the spring. (emphasis added)

Lempicki discloses a keyboard structure in which a scissored linkage assembly is secured to the bottom of a key cap member. The scissored linkage assembly includes a first pair of scissor arms 82 and a second pair of scissor arms 84, with longitudinally intermediate portions of the arms 82 being pivotally connected to longitudinally intermediate portions of the arms 84. (Lempicki, col. 5, lines 3 – 8, and Figures 3A, 3B, 5A, and 5B). Lempicki also discloses that the longitudinally intermediate portions of the scissor arms 84 are interconnected by a joining plate structure 102 having, on its underside, a bottom bearing surface 104, and a forwardly facing cam surface 106 extending at an angle to the bearing surface 104. (Lempicki, col. 5, lines 21 – 24, and Figures 3A, 3B, 5A, and 5B). Nothing in Lempicki discloses a plurality of legs interleaved together without a pivot point approximately central to the plurality of legs.

In contrast, independent claim 1 includes the limitation of "a plurality of legs interleaved together without a pivot point approximately central to the plurality of legs" (emphasis added). As such, Applicants respectfully submit that claim 1 is not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection. Claims 2 – 7 depend either directly or indirectly from independent claim 1, and thus include the limitation of "a plurality of legs interleaved together without a

pivot point approximately central to the plurality of legs." As such, Applicants respectfully submit that claims 2 – 7 are also not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection.

Amended independent claim 8 provides:

A keyswitch, comprising:

a plurality of legs having sides without flanges;

a key cap disposed above the plurality of legs; and

a base plate disposed below the plurality of legs, wherein the plurality of legs is constructed from a material comprising a metal.

(emphasis added)

Lempicki discloses a keyboard structure in which a scissored linkage assembly is secured to the bottom of a key cap member. The scissored linkage assembly includes a first pair of scissor arms 82 and a second pair of scissor arms 84, with longitudinally intermediate portions of the arms 82 being pivotally connected to longitudinally intermediate portions of the arms 84. (Lempicki, col. 5, lines 3 – 8, and Figures 3A, 3B, 5A, and 5B). First ends of the arms 84 are joined by a cylindrical rod 94 having its opposite ends pivotally anchored in tabs 96 on the bottom side of the support structure 38, while the opposite ends of the arms 84 have outwardly projecting cylindrical pins 98 slidingly received in slots 100 formed on the underside of the key cap member 40. (Lempicki, col. 5, lines 14 – 20, and Figures 3A, 3B, 5A, and 5B). Nothing in Lempicki discloses a plurality of legs without flanges.

In contrast, independent claim 8 includes the limitation of "a plurality of legs having sides without flanges" (emphasis added). As such, Applicants respectfully

submit that claim 8 is not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection. Claims 9 – 13 depend either directly or indirectly from independent claim 8, and thus include the limitation of "a plurality of legs having sides without flanges." As such, Applicants respectfully submit that claims 9 – 13 are also not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection.

Amended independent claim 14 provides:

A keyswitch, comprising:

a plurality of legs interleaved together without a pivot point approximately central to the plurality of legs to form a scissor-like arrangement, the plurality of legs having sides without flanges.

(emphasis added)

Lempicki discloses a keyboard structure in which a scissored linkage assembly is secured to the bottom of a key cap member. The scissored linkage assembly includes a first pair of scissor arms 82 and a second pair of scissor arms 84, with longitudinally intermediate portions of the arms 82 being pivotally connected to longitudinally intermediate portions of the arms 84. (Lempicki, col. 5, lines 3 – 8, and Figures 3A, 3B, 5A, and 5B). Lempicki also discloses that the longitudinally intermediate portions of the scissor arms 84 are interconnected by a joining plate structure 102 having, on its underside, a bottom bearing surface 104, and a forwardly facing cam surface 106 extending at an angle to the bearing surface 104. (Lempicki, col. 5, lines 21 – 24, and Figures 3A, 3B, 5A, and 5B). Nothing in

Lempicki discloses a plurality of legs interleaved together without a pivot point approximately central to the plurality of legs.

In contrast, independent claim 14 includes the limitation of "a plurality of legs interleaved together without a pivot point approximately central to the plurality of legs" (emphasis added). As such, Applicants respectfully submit that claim 14 is not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection. Claims 15 – 18 depend either directly or indirectly from independent claim 14, and thus include the limitation of "a plurality of legs interleaved together without a pivot point approximately central to the plurality of legs." As such, Applicants respectfully submit that claims 15 – 18 are also not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection.

Amended independent claim 19 provides:

> A keyswitch comprising:
>
> first and second legs each having a first end and a second end, the first end having two lower protrusions and the second end having upper protrusions, the lower protrusions of the second leg disposed between the lower protrusions of the first leg; and
>
> a base having a plurality of retaining clips, each of the lower protrusions of the first and second legs pivotally engaged with a corresponding one of the plurality of retaining clips, and each of the upper protrusions extended towards a cap. (emphasis added)

Lempicki discloses a keyboard structure in which a scissored linkage assembly is secured to the bottom of a key cap member. The scissored linkage assembly includes a first pair of scissor arms 82 and a second pair of scissor arms 84, with longitudinally intermediate portions of the arms 82 being pivotally connected

to longitudinally intermediate portions of the arms 84. (Lempicki, col. 5, lines 3 – 8, and Figures 3A, 3B, 5A, and 5B). Lempicki also discloses that the longitudinally intermediate portions of the scissor arms 84 are interconnected by a joining plate structure 102 having, on its underside, a bottom bearing surface 104, and a forwardly facing cam surface 106 extending at an angle to the bearing surface 104. (Lempicki, col. 5, lines 21 – 24, and Figures 3A, 3B, 5A, and 5B). Nothing in Lempicki discloses the lower protrusions of the second leg disposed between the lower protrusions of the first leg.

In contrast, independent claim 19 includes the limitation of "the lower protrusions of the second leg disposed between the lower protrusions of the first leg." As such, Applicants respectfully submit that claim 19 is not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection. Claims 20 – 24 depend either directly or indirectly from independent claim 19, and thus include the limitation of "the lower protrusions of the second leg disposed between the lower protrusions of the first leg." As such, Applicants respectfully submit that claims 20 – 24 are also not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection.

Amended independent claim 25 provides:

A keyswitch, comprising:

first and second legs each having a first end and a second end, <u>the first end and the second end being separated in height by less than approximately 1 millimeter</u> to reduce a thickness of the keyswitch.

(emphasis added)

Lempicki discloses a keyboard structure in which a scissored linkage assembly is secured to the bottom of a key cap member. The scissored linkage assembly includes a first pair of scissor arms 82 and a second pair of scissor arms 84, with longitudinally intermediate portions of the arms 82 being pivotally connected to longitudinally intermediate portions of the arms 84. (Lempicki, col. 5, lines 3 – 8, and Figures 3A, 3B, 5A, and 5B). Lempicki also discloses that the longitudinally intermediate portions of the scissor arms 84 are interconnected by a joining plate structure 102 having, on its underside, a bottom bearing surface 104, and a forwardly facing cam surface 106 extending at an angle to the bearing surface 104. (Lempicki, col. 5, lines 21 – 24, and Figures 3A, 3B, 5A, and 5B). Nothing in Lempicki discloses the first end and the second end being separated in height by less than approximately 1 millimeter.

In contrast, independent claim 25 includes the limitation of "the first end and the second end being separated in height by less than approximately 1 millimeter." As such, Applicants respectfully submit that claim 25 is not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection. Claims 26 – 27 depend either directly or indirectly from independent claim 25, and thus include the limitation of "the first end and the second end being separated in height by less than approximately 1 millimeter." As such, Applicants respectfully submit that claims 26 – 27 are also not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection.

Amended independent claim 28 provides:

A keyswitch, comprising:

a cap; and

a plurality of legs supporting the cap, each of the plurality of legs being a leaf spring that has a cantilevered structure formed by the plurality of legs engaged to each other to support parallel up and down movement of the cap.

(emphasis added)

Lempicki discloses a keyboard structure in which a signal pad structure is attached to the support structure. Two compression members, representatively leaf springs 226, are disposed laterally intermediate a rear side of the bar actuator 214 and an upstanding rear side 228 formed on the backing sheet 210. When keyboard structure 202 is assembled, leaf springs 226 are somewhat compressed between the bar actuator 214 and the rear side 228 of the backing sheet 210, forwardly biasing the dome sheet 206 to its first position relative to the support structure 38a. (Lempicki, col. 8, lines 30 – 38, and Figure 9). Nothing in Lempicki discloses each of the plurality of legs supporting a cap being a leaf spring that has a cantilevered structure.

In contrast, independent claim 28 includes the limitation of "each of the plurality of legs being a leaf spring that has a cantilevered structure." As such, Applicants respectfully submit that claim 28 is not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection. Claims 29 – 33 depend either directly or indirectly from independent claim 28, and thus include the limitation of "each of the plurality of legs being a leaf spring that has a cantilevered structure." As such, Applicants respectfully submit that claims 29 – 33 are also not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection.

Amended independent claim 34 provides:

A keyswitch, comprising:

a support;

a cap having a top and a bottom; and

a pair of legs coupled to the bottom of the cap and coupled to the support, and wherein the keyswitch has a height, when fully depressed of less than approximately 2.5 millimeters from the top to the support to reduce a thickness of the keyswitch. (emphasis added)

Lempicki discloses a keyboard structure in which a scissored linkage assembly is secured to the bottom of a key cap member. The scissored linkage assembly includes a first pair of scissor arms 82 and a second pair of scissor arms 84, with longitudinally intermediate portions of the arms 82 being pivotally connected to longitudinally intermediate portions of the arms 84. (Lempicki, col. 5, lines 3 – 8, and Figures 3A, 3B, 5A, and 5B). Lempicki also discloses that the longitudinally intermediate portions of the scissor arms 84 are interconnected by a joining plate structure 102 having, on its underside, a bottom bearing surface 104, and a forwardly facing cam surface 106 extending at an angle to the bearing surface 104. (Lempicki, col. 5, lines 21 – 24, and Figures 3A, 3B, 5A, and 5B). Nothing in Lempicki discloses a keyswitch having a height, when fully depressed of less than approximately 2.5 millimeters from the top to the support.

In contrast, independent claim 34 includes the limitation "the keyswitch has a height, when fully depressed of less than approximately 2.5 millimeters from the top to the support." As such, Applicants respectfully submit that claim 34 is not

anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection.

Amended independent claim 35 provides:

A keyswitch, comprising:

a spring having a first end and a second end;

a base;

a first compliant material disposed between the first end of the spring and the base; and

a second compliant material disposed between the second end of the spring and the base, wherein the first and second compliant materials provide a lateral compliance to the spring. (emphasis added)

Lempicki discloses a keyboard structure in which a scissored linkage assembly is secured to the bottom of a key cap member. The scissored linkage assembly includes a first pair of scissor arms 82 and a second pair of scissor arms 84, with longitudinally intermediate portions of the arms 82 being pivotally connected to longitudinally intermediate portions of the arms 84. When any of the key cap members 40 is manually depressed, against the resilient resistance of its associated return dome 48, the dome is downwardly deformed to cause an internal projection 108 therein to be downwardly pressed against a portion of the dome sheet 46 underlying the projection 108. (Lempicki, col. 5, lines 37 – 42, and Figures 3A, 3B). Nothing in Lempicki discloses first and second compliant materials that provide a lateral compliance to the spring.

In contrast, independent claim 35 includes the limitation of "wherein the first and second compliant materials provide a lateral compliance to the spring." As

such, Applicants respectfully submit that claim 35 is not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection. Claims 36 – 38 depend either directly or indirectly from independent claim 35, and thus include the limitation of "wherein the first and second compliant materials provide a lateral compliance to the spring." As such, Applicants respectfully submit that claims 36 – 38 are also not anticipated by Lempicki under 35 U.S.C. § 102(b) and request removal of the rejection.

In conclusion, Applicants respectfully submit that in view of the amendments and arguments set forth herein, the applicable rejections have been overcome. If the allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Suk Lee at (408) 720-8300. If there are any additional charges, please charge our Deposit Account No. 02 – 2666.

Respectfully submitted,

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